

**REMARKS**

At the outset, Applicants wish to thank the Examiner for the courtesies extended to the Applicants' representatives during the personal interview on March 9, 2004. The final Office Action of December 9, 2003 has been received and contents carefully reviewed.

By this Amendment, Applicants amend claims 42 and 46, and cancel claim 43 without prejudice or disclaimer. Accordingly, claims 1-13, 17-19, 22, 24-25, 27, 29-42, and 44-48 are currently pending in the present application. Reexamination and reconsideration of the application are respectfully requested.

In the Office Action, the Examiner rejected claims 1-5, 10-13, 16-19, 42-44, and 46-48 under 35 USC § 102 (a and e) as being anticipated by Makita et al. (US Patent No. 5,851,860); and rejected claims 7-9, 14, 15, 22, 24-41, and 45 under 35 USC § 103(a) as being unpatentable over Makita et al. Applicants respectfully traverse these rejections.

Claim 1 is allowable over the cited references in that claim 1 recites a combination of elements including, for example, "annealing the amorphous silicon layer, wherein the annealing is carried out for less than about 50 minutes." None of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 1 and claims 7-13, 27 and 30, which depend therefrom, are allowable over the cited references.

Applicants respectfully submit that, while the annealing process of the present invention is carried out for less than 50 minutes for crystallization of an a-Si layer, the annealing process of Makita et al. is carried out for about four hours (see col. 9, line 13 and col. 19 line 36) or several tens of hours (see col. 14 line 17 and col. 17 line 15). Thus, Applicants respectfully submit that Makita et al. does not teach or suggest the claimed invention.

Claim 2 is allowable over the cited references in that claim 2 recites a combination of elements including, for example, "annealing the amorphous silicon layer, wherein the annealing is carried out for less than about 50 minutes." None of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 2 and claims 3-6, 29 and 31-35, which depend therefrom, are allowable over the cited references.

Claim 22 is allowable over the cited references in that claim 22 recites a combination of elements including, for example, "a heater arranged at the substrate support, the heater supplying the substrate with heat for performing crystallization while the plasma generating device produces plasma inside the chamber, wherein the performing crystallization is carried out for less than about 50 minutes." None of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 22 and claims 24-25 and 41, which depend therefrom, are allowable over the cited references.

Claim 42 is allowable over the cited references in that claim 42 recites a combination of elements including, for example, "exposing the amorphous silicon layer to the atoms of the inducing substance; and annealing the amorphous silicon layer, wherein the annealing is carried out for less than about 50 minutes." None of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 42 and claim 44, which depends therefrom, are allowable over the cited references.

Claim 45 is allowable over the cited references in that claim 45 recites a combination of elements including, for example, "a plasma generating device having a metal source connected to a power supply, the plasma generating device producing plasma inside the chamber by supplying the metal bar with RF or DC power from the power supply to deposit a crystallization catalyst on an exposed surface of the amorphous silicon layer..." None of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 45 is allowable over the cited references.

Claim 46 is allowable over the cited references in that claim 46 recites a combination of elements including, for example, "exposing the amorphous silicon layer to the atoms of the inducing substance while annealing the amorphous silicon layer, wherein the annealing is carried out for less than about 50 minutes." None of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 46 is allowable over the cited references.

Claim 47 is allowable over the cited references in that claim 47 recites a combination of elements including, for example, "...wherein the inducing substance deposited is in continuous

and direct contact with the amorphous silicon layer." None of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 47 is allowable over the cited references.

Claim 48 is allowable over the cited references in that claim 48 recites a combination of elements including, for example, "depositing a metal inducing substance on the amorphous silicon layer using a plasma generating equipment having an electrode, the electrode of the plasma generating equipment including the metal inducing substance... depositing a layer for the semiconductor device on the metal inducing substance using the plasma generating equipment without exposing the substrate to an external atmosphere..." None of the cited references, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicants respectfully submit that claim 48 is allowable over the cited references.

Applicants believe the foregoing amendments place the application in condition for allowance and early, favorable action is respectfully solicited. If the Examiner deems that a telephone conference would further the prosecution of this application, the Examiner is invited to call the undersigned attorney at the telephone number (202) 496 - 7500. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the

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filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911.

Respectfully submitted,

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